

REPORT OF AN EXAMINATION OF THREE ARCHAEOLOGICAL SITES  
IN HUNTING AREA 1, FORT KNOX, KENTUCKY

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16. Abstract (Limit 200 words)  The locations of three sites in Hunting Area 1, Fort Knox, Kentucky, were examined intensively to determine their perimeters prior to a tree planting project by the Forestry Division. During subsurface testing it was seen that the entire area had been disturbed and compacted by tank training in the past. Dated aerial photographs revealed the use of this area for heavy tank traffic over a period of decades.					
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Summary. The locations of three sites in Hunting Area 1, Fort Knox, Kentucky, were examined intensively to determine their perimeters prior to a tree planting project by the Forestry Division. During subsurface testing it was seen that the entire area had been disturbed and compacted by tank training in the past. Dated aerial photographs revealed the use of this area for heavy tank traffic over a period of decades.

Artifact density was so low that none were recovered in subsurface tests. Surface visibility varied from near zero to 50 percent and no artifacts were seen. Given the disturbed soils to a depth greater than 24 inches, these sites are not seen as having sufficient integrity to retain information significant to a study of Kentucky's past.

Setting. All three sites lie on a broad terrace of the Ohio River between the historic locations of Pilcher Landing and Hughes Landing, near river mile 635 (Figures 1 and 2). The mapped locations for these sites are in grassy and weedy irregular fields two to three hundred meters wide that, combined, extend over a kilometer in length, running parallel to the river some three to four hundred meters to the northwest.

Procedures. The entire area containing the three sites was examined by pedestrian survey. The original survey that discovered 15Md152 and 15Md153 (O'Malley, et al. 1980) covered the entire area of this project, thus it was presumed that the entire project area did not need intensive 20 m interval shovel testing. The intent was to relocate the three sites, determine their extent through surface examination and shovel testing, and mark the sites.

Shovel tests involved the excavation of 30 cm by 30 cm holes to subsoil. The dirt was screened through 1/4-inch mesh hardware cloth. Any artifacts would be bagged and labeled to record their provenience. No Munsell soil color chart could be located at Fort Knox; an ordered chart will not arrive until October, so soil descriptions were made subjectively. A soil survey will be available in 1993.

The northeastern extent of 15Md152 coincides with an existing two-track road, which helped to pinpoint the location of that site. The only mapped landmark near the southwesternmost site, 15Md153, was river mile 635. A small trail to the river brought a position marker to view marked "634.6". Driving from that point four tenths of a mile parallel to the river gave a starting point for searching for 15Md153. Mueller (1991) recorded 15Md322 midway between the two other sites.

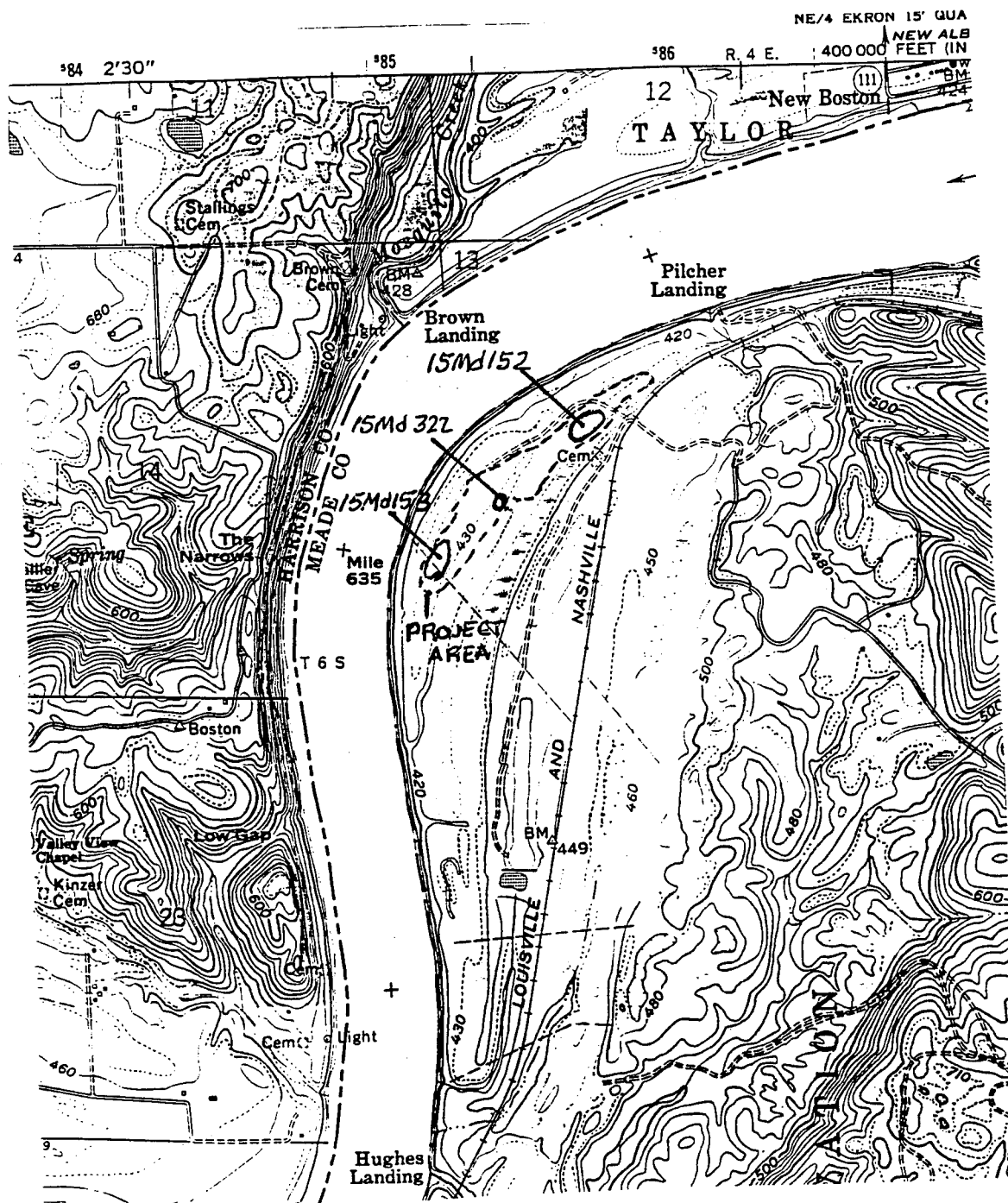


Figure 1. Portion of Rock Haven U.S.G.S. topographic quadrangle map showing project area and archaeological sites.



Figure 2. Oblique aerial view of project area looking southwest.

15Md152. O'Malley, et al. (1980:38-39) described the site as having 100 percent surface visibility, and containing prehistoric lithic artifacts, a scatter of fire-cracked rocks, and scattered historic artifacts, all spread over a 100 m by 200 m area. These were assigned to the Early Archaic, Late Archaic and/or Early Woodland prehistoric occupations. The historic artifacts were assigned to a nearby community of Bartles, now gone.

Beginning 20 m southwest of the road center, 30 cm by 30 cm shovel tests were placed at 20 m intervals in a line parallel to the mapped axis of the site for a distance of approximately 200 m. The first test disclosed a dry, uniform, packed hard-packed, light reddish brown sandy clay. This test was widened to 50 cm by 50 cm and extended to 80 cm in depth (Figure 3). No early artifacts were found, and subsoil was never encountered. There was a slight softening in soil texture at 60-80 cm of depth that coincided with an increase in moisture. No natural strata were seen.

Subsequent tests were made to a depth of 45-50 cm. Soil color lost the reddish hue in tests to the southwest, shading to light or very light brown. Occasional clods of clay were found in three tests which suggest a deep churning of the soil since no clay strata were encountered anywhere.

15Md153. The mapped extent of 15Md153 appears to stop near the south end of the fields. Chest high brambles and near zero surface visibility prevented a thorough ground search. A 4 x 4 vehicle was driven across the mapped area of the site to create a linear path for a shovel test transect. Thirteen shovel tests were placed along this southwest to northeast line; all tests were sterile, and disclosed a uniformly disturbed brown sandy loam. All tests were extended to 50 cm in depth, and no soil changes were seen. No artifacts were uncovered.

15Md322. Mueller (1991:42-45) found 15Md322 midway between 15Md152 and 15Md153. The conditions he described reflect those described here, poor visibility and waist-high grasses and weeds. Mueller found two tertiary chert flakes and a piece of an eroded granitic cobble in two shovel tests, the minimum criteria for a site. Noting the formerly cultivated fields, reputed tank training, and tree plantings, Mueller recommended no further work for this site.

Five shovel tests were conducted across the mapped location for this site. No artifacts were found, but a shallow depression that might have been a structure site was found and tested but the soil in and over the depression was consistent with heavily disturbed tank training areas.



Figure 3. Shovel test 1 at 15Md152, looking northwest.

Conclusion. Aerial photographs of the project area were provided by David Apsley and John Whitesides of the Forestry Division. The earlier photo was taken June 8, 1960, and only shows the southern half of the project area (Figure 4). The white area is coincident with the field containing 15Md153, and is clearly part of ongoing heavy vehicle (tank) training. The later aerial photograph is dated July 28, 1971, and shows the entire project area (Figure 5). The southern half appears the same as in the earlier photograph, and the entire area now covered in grass was barren, apparently for at least 20 years, 1960 to 1980, when O'Malley described the visibility as 100 percent.

The sterile tests do not mean that sites are not present or that the author disagrees with the findings of earlier archaeologists. O'Malley's finds were all surface finds; surface collections in areas of 100 percent visibility can be expected to be sizable in comparison to shovel test samples. It is likely that a number of artifacts have worked their way to the surface over the dozen or so years since the University of Kentucky team made their collections. Figure 6 shows a portion of a map made in 1903 of the general area and the three farmsteads circled roughly coincide with the three sites recorded earlier.

Nineteenth century sites that have been preserved offer much to the study of that period, but these three sites lie in a heavily disturbed area. Shovel tests show that the disturbance extends to an unknown, but considerable depth in excess of 60 cm. It is concluded that none of the three sites meets the criteria for eligibility to the National Register of Historic Places (36CFR60.4). No tangible evidence exists for the determination of their boundaries, so they cannot be accurately flagged and avoided. Therefore, it is recommended that the project be allowed to proceed through the sites.





Figure 4. Portion of aerial photograph of southern half of project area taken June 8, 1960. Dotted line approximates project area boundary; "xx" approximates location of 15Md153.



Figure 5. Portion of aerial photograph taken July 28, 1971, showing the project area (white), XX denotes 15Md153, Y indicates location of 15Md322, and ZZ, that of 15Md152.

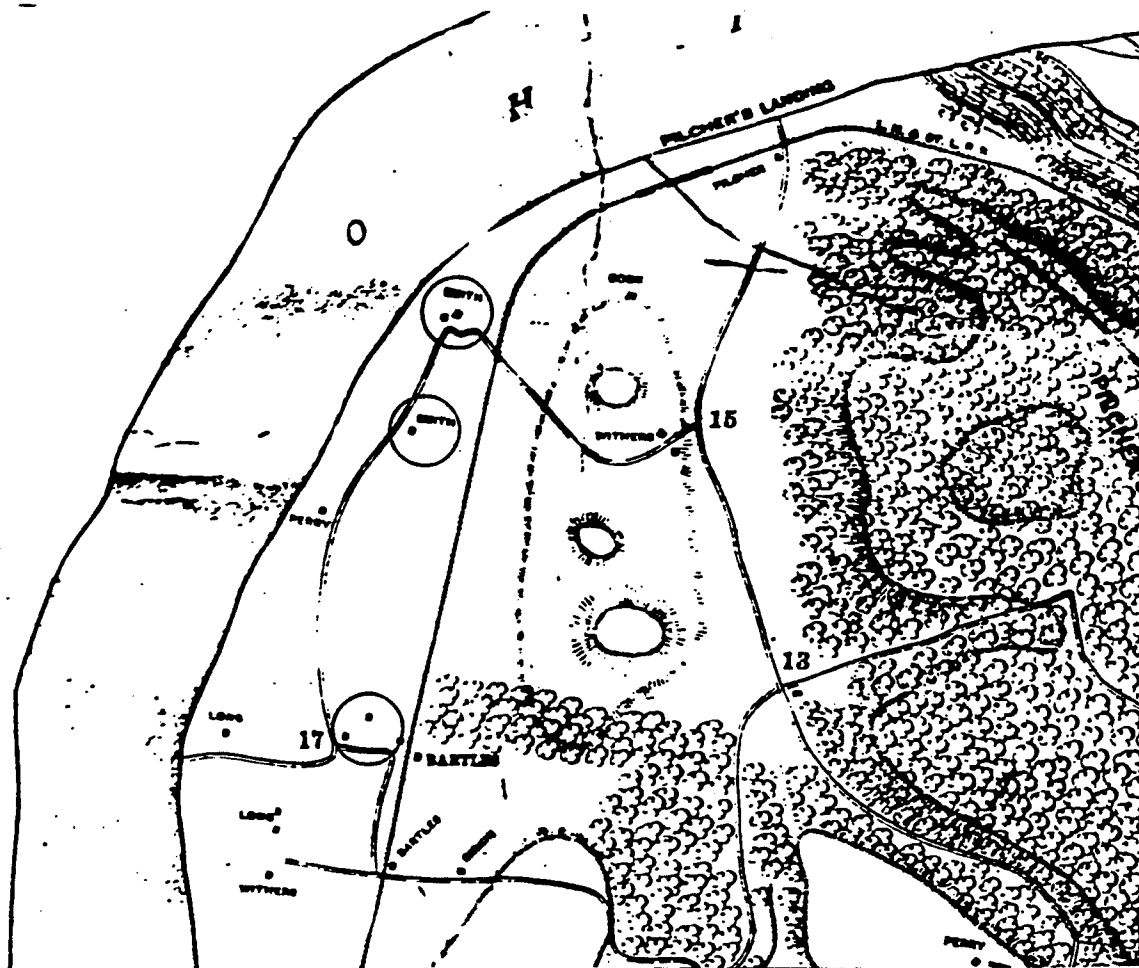


Figure 6. Portion of 1903 map (Ernst 1903) showing project area. Circled farms may correlate with at least two recorded sites.

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